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SKIRR
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ABSTRACT

SKIRR is an animated graduate thesis that showcases 6 different environments and the life within them. It focuses on the beauty of life and art, and the creation of both. This film is comprised of 3D, 2D, and stop motion animation. It was produced digitally using various video, audio and animation software.

The following paper outlines the development and production of this film. I address concept, style and influences, goals, production process and overall experience. To further illustrate the creative process, supplementary materials are included.

CONCEPT

The idea for *SKIRR* came along while I was in a phase of almost exclusively watching nature documentaries, particularly the Plant Earth series. I was in awe of this beautiful high definition footage and felt inspired to create a series of vignettes that would showcase small glimpses of creatures and environments of my own design. Expanding further on the idea, I decided to employ my strong interest in art history and have each scene be inspired by specific movements in art history. I chose particular styles that I have the most interest in and draw from regularly in my work. I wanted to make a film to create a feeling of awe and wonder in the beauty of life and art, and the creation of both.

GOALS

When considering the type of thesis I wanted to pursue, I had several goals I wanted to achieve with the project. More than anything, I wanted to really challenge my skills as a technical artist. My previous film had only featured a robotic character, so I knew I wanted to create multiple creatures that would deform and move organically. I also knew that because of the number of characters in my film, it would be most efficient to implement as much looping animation as possible. As such, I wanted to focus on basic motion cycles such as walks, runs, and flight and swim cycles.

Additionally, another goal was to really push my art directing skills and create a number of different styles throughout the film. With only two films previously completed, I wanted to provide more variety to my portfolio that I would soon be shopping around. To achieve this goal, I wanted to experiment with different renderers and shaders in Maya as well as implement other mediums of animation including stop motion and live action.

Lastly I wanted to maintain an organized production. Previous films had been on such short production pipelines that all order had been abandoned and navigating files was a mess. I wanted to thoughtfully plan out each pipeline step, document, label and organize my work in a way that was not only useful to me, but could also be picked up and understood by anyone else. This was a goal in effort to prepare for working in larger productions with others after graduate school.

STYLE AND INFLUENCES

The changing of styles in *SKIRR* is one of the film's most dominant features. It is influenced by several artistic movements including cave painting, brush painting, illuminated manuscripts, Art Nouveau, and modernism. These are all styles that I draw influence from readily in my work. The last section of the film is a mash up of all of these styles coming together as one look.

The character designs are influenced from the style that they are rendered in. The fish is patterned with early tribal designs. The lizard's face was inspired by paintings of Japanese monsters. The Nouveau squirrel and bird are extremely ornate, featuring many curves, flowing lines and small details. Lastly the tree frog in the modern style features a simple, clean design. Environments and plants were similarly fashioned off of these styles.

PRODUCTION PIPELINE

My production pipeline was stretched out much longer than initially proposed in my timeline (see Appendix A). The scope of the project and the decision to pursue career opportunities extended the one-year project into a three year endeavor.

The majority of the fall quarter was spent designing characters, storyboarding and creating an animatic for the film. This process took longer than expected as I was still refining the script during the storyboard process.

The next 10 weeks were spent modeling and rigging characters. I created 7 characters, about one per week. Through the help of The Setup Machine, I was able to quickly create rigs in 1-2 days per character. The squirrel and plant-like bird characters had complex tails which I rigged by hand using joint chains and added jiggle deformers for secondary movement. After I finished rigging and skinning each character, I moved on to creating blendshapes for facial expression. I created these shapes in Zbrush using sculpting tools to push and pull the vertices of the model into the shapes I wanted. I created a simple MEL script to quickly read all of the blendshapes and create a simple face rig. This was the first time I had used this process and took a while to initially figure out, but it proved to be efficient in the end due to the number of characters I was creating.

I next moved straight into animating shots. Working from my animatic, I had a good idea of what each shot should look like. I knew I wanted the film to flow organically from one shot to the next, so I decided the best way was to approach this was animate the shots in order from beginning of the film to end. I first created animation cycles that were used throughout the series of shots that each character was featured in. Then I used the cycles to flush out the action necessary to the scene, adding animation detail as necessary. Then I framed the action and animated the camera as I saw most appropriate. Finally I modeled props and set pieces as necessary to fill the shot's environment. While modeling and set dressing is not typically done after animation, I found it to be a good workflow for me. By

knowing how much space was actually seen within a shot, I was able to efficiently create enough pieces to fill the screen without creating more than necessary.

While most of the animation was completed in Maya, I did incorporate multiple mediums so these instances took a bit of planning. I decided to incorporate stop motion and video to achieve effects that Maya would fail to capture. The dragonflies and flower transform during the film's second scene were created with the help of Jordan Greenhalgh and Brian Baldwin. Using paper and tin foil, I created the puppets that they animated against a black background. Using a digital SLR, lights, and Dragon animation software, we captured this animation frame by frame. I composited their work into my Maya animation using After Effects. The ink splats and drips were created using a video camera, ink and paper. This footage was also cleaned up and composited into the film using After Effects.

Creating textures for the characters and environments to match the styles I wanted to achieve proved to be quite difficult. I had to paint many textures maps in Photoshop. I also had to render in layers so I would have the ability to use different compositing modes in After Effects. This allowed me to multiply characters onto backgrounds, allowing them to blend into their environments better.

After rendering and editing, I created a scratch track that best captured the mood of the film. Working from this, Drew Cappotto and Andres Quiroz created the sound. Sending notes and different versions back and forth, we arrived at the final soundtrack.

EXPERIENCE

Over the last three years of working on *SKIRR*, I have learned a great deal. While the film was conceived and originally planned at RIT, a good portion of this film was created in isolation. Without the constant feedback of my peers and academic community, I was faced with making a lot of creative and technical decisions myself. Ultimately this was a great step for me because I gained much more confidence in my artistic decisions. I also had to do a lot of research to figure out a lot of the technical aspects of my project. Being in a community of my peers may have given me these answers faster, but the satisfaction of solving problems myself was very rewarding.

While I did spend longer on this film than initially planned, the extra time allowed me to further develop ideas and spend more time animating and polishing. Ultimately this was extremely rewarding because I was able to let my film naturally develop over time, rather than rushing through to meet a deadline. The extra time for pre-production was especially helpful. Polishing the storyboards and animatic gave me a greater understanding of exactly what type of film I was creating.

The extended production time was invaluable as I was able to work with mediums and technical tools that I had previously never explored. Working in stop motion and video was a great experience. Directing two other animators, I discovered the importance of planning, communication and teamwork. It was also great to step away from the computer for a few weeks and do some hands on work. Also through this process I learned a lot about compositing, a skill I had never previously learned. The extra time also allowed me to experiment with rigging deformers and render settings such as motion blur and Final

Gather. While teaching myself these new, technical aspects of Maya was difficult, there implementation in my film really adds to the final product.

I really tested my animation skills with the variety of characters and complexity of their actions. Creating a running quadruped or flight cycle was something I had never done before. Though animating was challenging and rewarding, I know there is still room for improvement. I learned I still have a lot of work to do to improve upon my animation skills.

Throughout the course of its creation, *SKIRR* remained relatively close to the storyboards originally conceived in Rochester 3 years earlier. Comparing the final product to the animatic I first made, they are remarkably similar. The final shots feature more dynamic camera angles and moves, better designs, and a more refined edit. These improvements stand as a testament to my growth as a filmmaker throughout the process. I feel very accomplished at the completion of this film. I am happy that all of the hard work contributed to a final product that I am pleased with. I look forward to using the knowledge and experience I have gained in my continued career as an artist.